Integration of Habitat Actions to Address Process, Function & Structure in Issaquah Creek and its Tributaries (Includes Lake Sammamish Recommendations)

Process: Gently sloped lake shorelines with shallow water habitats and overhanging vegetation provide juvenile salmon with rearing habitat and safe refuge from predators.

Function Provided: Habitat
Shelter from predation

Land Use: Provide incentives and regulatory flexibility that encourage salmon-friendly shoreline design and redevelopment.

Site-Specific: Ensure that the final Lake Sammamish State Park development plan adequately protects floodplain/riparian processes and mouth of Issaquah Creek.

Public Outreach: Promote mutual value of light-permeable docks, smaller piling sizes, and community docks to both salmon and property owners by direct mailings to lakeshore property owners or registered boat owners.

Process: Small creek mouths with sandy deltas and wetlands provide habitat for juvenile rearing and haven from predators.

Function Provided: Habitat
Shelter from Predation

Land Use: Address impacts from upland development through stormwater management and low-impact development, protecting forest cover and riparian buffers through regulations and incentives, and technical assistance.

Site-Specific: Purchase critical parcels adjacent to creek mouths.

Public Outreach: Encourage participation of citizen based stewardship efforts for creek mouth restoration and water quality protection.

Process: Forest cover, wetlands, and floodplains prevent high flows and erosion, maintain adequate stream flows, protect water quality and temperature, and provide sources of large woody debris that provide salmon habitat.

Functions Provided: Water Quality
Water Quantity
Habitat

Land Use: Prohibit new development and roads in floodplains. Planning for new roads, and maintenance and retrofitting of existing roads, should minimize new road crossings, and impacts on floodplains and water quality.

Site-Specific: Continue to implement the Issaquah Waterways program to protect best remaining habitat. Acquire additional forested areas along the East Fork of Issaquah Creek Reaches 3, 2, 1, and additional forested areas along Fifteenmile Creek in Reach 1 and 2.

Public Outreach: Continue and expand Creekside Landowner Assistance Program including classes, technical and financial assistance in shoreline landscape design, maintenance, and streambank armoring alternatives.

Process: Adequate stream flows allow upstream migration and spawning.

Functions Provided: Water Quantity
Habitat

Land Use: Carry out programs that protect aquifer recharge areas, and encourage low impact development. Work with Department of Ecology, local health departments, and water suppliers to address impact of municipal withdrawals, illegal withdrawals, and exempt wells throughout basin.

Site-Specific: Explore opportunities to protect and restore instream flows to the North Fork.

Public Outreach: Promote and extend availability of water conservation incentive programs, outreach on rainwater harvesting, and graywater capture for reuse in landscape irrigation. Support conservation efforts within the Cascade Water Alliance.

Process: Unarmored, vegetated streambanks provide shade that keep temperatures cool, protect water quality, prevent erosion, and provide connections to backwater pools and side channels used by salmon.

Functions Provided: Water Quality
Habitat

Land Use: Protect aquatic buffers through CAOs, offer incentives (PBRS, easements) for private property owners to protect buffers and/or revegetate and remove channel confinement.

Site-Specific: Explore opportunities for riparian restoration projects.

Public Outreach: Offer educational opportunities to landscape designers/contractors on riparian design/installation, alternatives to invasive species, and use of compost.

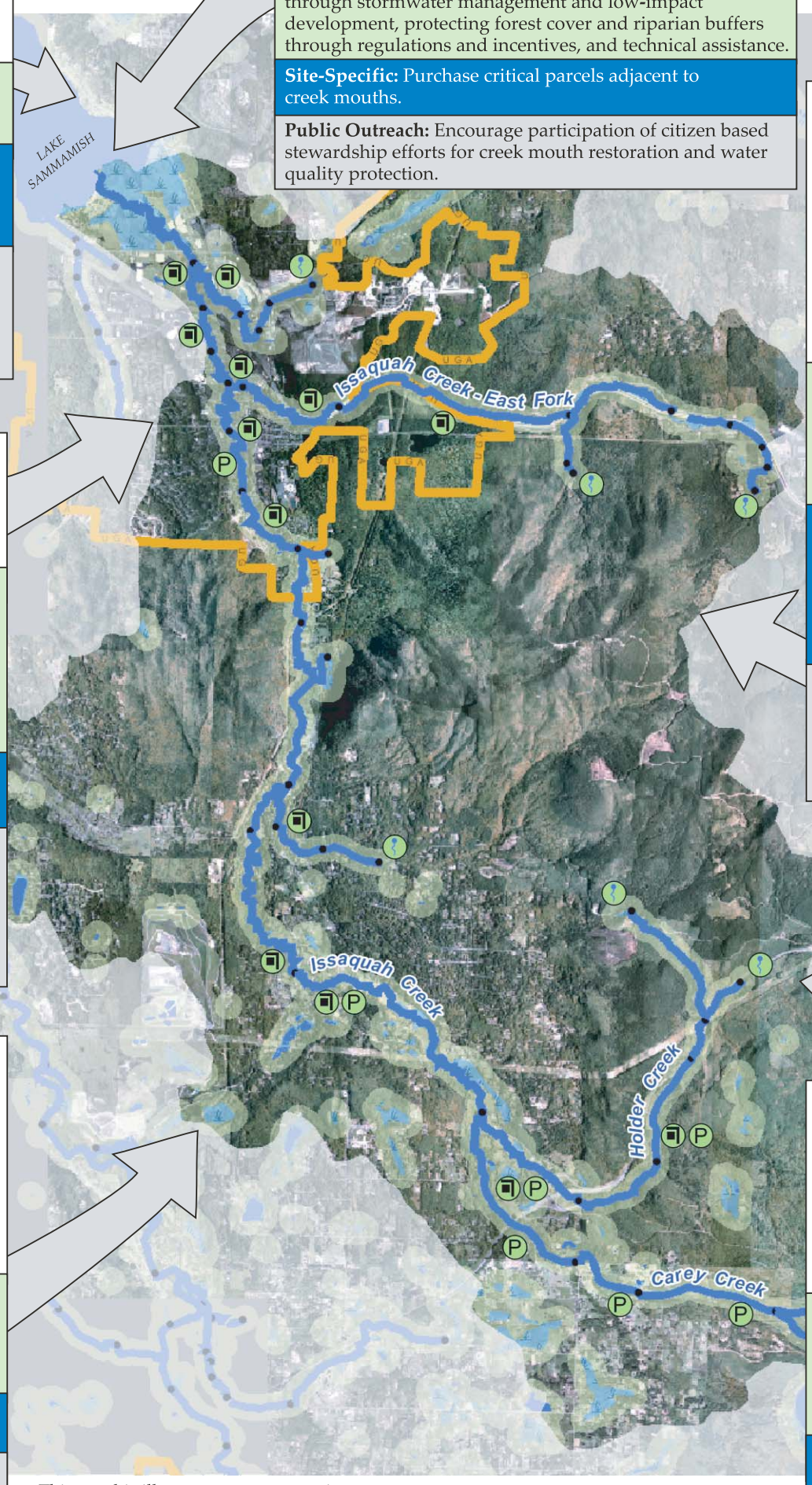
Process: Headwaters and sources of groundwater maintain cold water temperatures and natural hydrological processes. Carey and Holder Creeks are important cold water sources.

Functions Provided: Water Quality
Water Quantity

Land Use: Protect headwaters and groundwater through protection of wetland buffers, critical aquifer recharge areas, and programs that encourage low impact development. Implement of the 2003 Taylor Mountain Forest Stewardship Plan.

Site-Specific: Acquire forest property, development rights/conservation easements in the Tiger Mountain State Forest and Taylor Mountain County Forest vicinity, and other headwater areas.

Public Outreach: Run Natural Yardcare Neighborhoods Program and other landscaping education opportunities in communities in the Issaquah Basin. Increase visitation of basin residents to Pickering Farm Community Teaching Garden.



This graphic illustrates a representative sample of actions. It does not include all proposed actions.

Vicinity Map

Key to Action Types

Green denotes adjacent land use actions across the watershed or in the immediate vicinity of water or key habitats (e.g., wetlands) where regulations/incentives coupled with public education can protect or restore water quality or quantity, and habitat conditions. In the short- and long-term, land use actions in these areas have a major effect on aquatic habitat conditions and the processes that create and maintain that habitat.

Blue denotes areas along water bodies where site-specific actions are proposed to protect or restore specific stream reaches. Such actions may protect or restore habitat functions, or address symptoms of degraded habitat functions. These actions are supported by land use and public education actions that protect habitat processes and functions throughout the watershed.

Gray denotes areas where broader and public outreach actions are proposed throughout the watershed. Responsible land stewardship and low impact development protect and maintain natural flow regimes and water quality.

Examples of Site-Specific Project Recommendations

Restoration by Reach
- Add LWD as Opportunities Arise
- Restore and Replant Riparian Vegetation

Protection by Reach
- Reforest Cleared Areas
- Protect Riparian Habitat through Acquisition
- Protect Headwaters and Springs
- Protect Large/Public Parcel of Land

- Study Reaches (EDT)
- Water Body
- Urban Growth Boundary
- Wetland
- Merged Buffer

N

0 0.25 0.5 0.75 1 Scale in Miles

0 0.5 1 1.5 2 Scale in Kilometers

King County
Department of Natural Resources and Parks
Water and Land Resources Division

0502habactionsISS.ai (CS) wgab